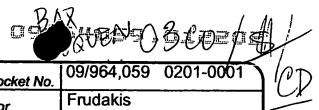
Ų	4



VO3	:	Attomey	09/964,0	59	0201-0001	
o' 🖏 Re	ESPONSE	First Inve	Frudakis			
JAN 2 2 2002 \$ TRA	NSMITTAL	Title Eff	Efficient Methods and Apparatus F			or High-Throug
A		Express N	fail Label No	o	·	
	ATION ELEMENTS	ADDR	ESS TO:	Box Patent /	Applica	
	cerning utility patent application contents. Form (e.g., PTO/SB/17)	7.	CD-ROM or C	Washington		
1. (Submit an original and a	a duplicate for fee processing) small entity status.	لنا	Computer Pro	gram (<i>Append</i>	ix)	
2. See 37 CFR 1.27	· each	8. Nuclei (if app	otide and/or An olicable, all nec	nino Acid Sequ essa <i>rv</i>)	ience :	Submission
3. Specification Specification (preferred arrangement	[Total Pages 73]	a. 🗸	_	eadable Form	(CRF)	
- Descriptive title	of the invention	<u>−</u> b. Sp	- ecification Sequ	uence Listing o	วก:	
- Cross Reference - Statement Reg	ce to Related Applications parding Fed sponsored R & D	-		ROM or CD-R (es); or
- Reference to s	equence listing, a table,		ii. Dape	r	•	
 Background of 	program listing appendix the Invention	a V	Statements	verifying identi	ty of a	bove copies
- Brief Summary - Brief Description	of the Invention (if filed)	AC	COMPANY			
- Detailed Descr		9.				document(s))
- Claim(s) - Abstract of the	Disclosure	10.	37 CFR 3.73	(b) Statement	г	Power of
FORMAL				is an assignee		Attorney
4. Drawing(s) (35 L	J.S.C. 113) [Total Sheets 4]	11.		station Docum	ent <i>(if</i> :	applicable) Copies of IDS
5. Oath or Declaration	[Total Pages]	12.	Information D Statement (II	Jisciosure DS)/PTO-1449	L	Citations
a. Newly exec	uted (original or copy)	13.	Preliminary A			ponse
b. Copy from a	a prior application (37 CFR 1.63 (d)) httion/divisional with Box 18 completed)	14.	Return Rece	ipt Postcard (N	APEP :	
i. DELET	ION OF INVENTOR(S)	15.	Certified Copy of Priority Document(s)			
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR		15. (if foreign priority is claimed) 16. Nonpublication Request under 35 U.S.C. 122				
	and 1.33(b).	16.	(b)(2)(B)(i). A	Applicant must	attach	U.S.C. 122 form PTO/SB/35
6. Application Data	Sheet. See 37 CFR 1.76		or its equival	ent. eck For \$1.10.	oo 🛂	1 mo. Ext
		17.	Co. L.Co.	Dy.of.Notice.to	p. File. 9	
18. If a CONTINUING APPLI or in an Application Data She	CATION, check appropriate box, and support under 37 CER 1.76:	ply the requisit	e information b	elow and in a	prelim	inary amendment,
Continuation	Oivisional Continuation-in-part (CIP)	ad m	rior application No.:			:
Prior application information:	Exeminer:		Group Ar	t Unit:		
For CONTINUATION OR DIVISI	ONAL APPS only: The entire disclosure of the	e prior applicat	lian from which	on ooth or doe	laratio	n Is supplied under
The incorporation can only be	f the disclosure of the accompanying continum relied upon when a portion has been inadver	iation or division bently omitted (onal application from the submitt	and is hereby i ted application	ncorpo parts.	rated by reference.
	19. CORRESPONDI					
Customer Number or Bar Co	ode Label (শিহস্তা উৎপ্রকাজা No তা এইএটা টত	edskihlika)	or [Correspor	ndence a	ddress below
Name	John J. Oskorep					
	One Magnificent Mile Center			*!		
Address	980 N. Michigan Avenue, Suite 1400					
City	Chicago			60611		
Country	USA Tele	phone 312-222-1860				773-477-6144
Name (Print/Type)	John J. Oskorep	Reaistra	ation No. (Atto	omey/Agent)	41	234
Signature	(1000)	\			1	
gridiaro				Date	<u> </u>	11/2002



aggara, area

PTO/SB/17 (10-01)

Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE TO ANOMITTAL		Complete if Known		
FEE TRANS	MIIIAL	Application Number	09/964,059	
for FY 2002 Patent fees are subject to annual revision.		Filing Date	09/26/2001	
		First Named Inventor	Frudakis	
		Examiner Name	unknown	
		Group Art Unit	2857	
TOTAL AMOUNT OF PAYMENT	(\$) 110.00	Attorney Docket No.	0201-0001	

The Commissioner is hereby authorized to charge Large Expension Large	METHOD OF PAYMENT	FEE CALCULATION (continued)				
Large Small Entity Small Entity Fee Fee Fee Pee Stansin for reply within first month 110.00		3. ADDITIONAL FEES				
Coopering Coop	indicated tees and credit any overpayments to.					
Code (\$) Code (\$) Code (\$)	Account	l	Paid			
Charge Any Additional Fee Required 127 50 227 25 Surcharge - late firing fee or oath 127 50 227 25 Surcharge - late provisional filing fee or cover sheet 127 50 227 25 Surcharge - late provisional filing fee or cover sheet 128 139 130 139 130 Non-English specification 139 130 Non-English specification 139 130 Non-English specification 147 2,520 1			- 10			
Charge Arry Additional Fee Required	Account	105 130 205 65 Surcharge - late filing fee or oath				
Applicant claims areal entity status. 139 130 139 130 139 Non-English specification	Charge Any Additional Fee Required					
2. Payment Enclosed:	<u> </u>	139 130 139 130 Non-English specification				
Check	See 37 CFR 1.27	147 2,520 147 2,520 For filing a request for ex parte reexamination				
FEE CALCULATION 1. BASIC FILING FEE Large Entity Small Entity Fee						
1. BASIC FILING FEE Large Entity Small Entity Fee Fe						
1. BASIC FILING FEE Large Entity Small Entity Fee	FEE CALCULATION	Examiner action	0.00			
116	1. BASIC FILING FEE	110 110 210 30 Extension for reply within institutional	0.00			
118 1,40 218 720 218 219 219 219 219 220	Large Entity Small Entity					
101 740 201 370 Utility filing fee						
107 510 207 255 Plant filing fee						
108 740 208 370 Reissue filing fee	106 330 206 165 Design filing fee	128 1,960 228 980 Extension for reply within fifth month				
2. EXTRA CLAIM FEES Substitute Substitute	107 510 207 255 Plant filing fee		 			
SUBTOTAL (1) (\$) 138 1,510 Petition to institute a public use proceeding 140 110 240 55 Petition to revive - unavoidable 141 1,280 241 640 Petition to revive - unavoidable 141 1,280 241 640 Petition to revive - unavoidable 141 1,280 241 640 Petition to revive - unintentional 142 1,280 242 640 Utility issue fee (or reissue) 143 460 243 230 Design issue fee 144 620 244 310 Plant issue fee 144 620 340 Plant is	108 740 208 370 Reissue filing fee					
SUBTOTAL (1) (\$) 140 110 240 55 Petition to revive - unavoidable 2. EXTRA CLAIM FEES Total Claims	114 160 214 80 Provisional filing fee	, , , , , , , , , , , , , , , , , , , ,	\dashv			
2. EXTRA CLAIM FEES Total Claims	SUBTOTAL (1) (\$)					
Total Claims						
Total Claims	Fee from		$\overline{}$			
Independent		, , ,				
Multiple Dependent Large Entity Small Entity Fee Fee Fee Fee Fee Fee Fee Fee Fee Description Code (\$) Code (\$) 102 84 202 42 Independent claims in excess of 3 104 280 204 140 Multiple dependent claim, if not paid 109 84 209 42 "Reissue independent claims over original patent 110 18 210 9 "Reissue claims in excess of 20 110 18 210 9 "Reissue daims in excess of 20 SUBTOTAL (2) (\$) ***or number previously paid, if greater, For Reissues, see above 122 130 122 130 Petitions to the Commissioner 123 50 123 50 Processing fee under 37 CFR 1.17(q) 126 180 126 180 Submission of Information Disclosure Stmt 128 180 581 40 Recording each patent assignment per property (times number of properties) 146 740 246 370 Filing a submission after final rejection (37 CFR § 1.129(a)) 149 740 249 370 For each additional invention to be examined (37 CFR § 1.129(b)) 149 740 249 370 Request for Continued Examination (RCE) 169 900 169 900 Request for expedited examination of a design application Other fee (specify) **Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 110.00	Independent X					
Large Entity Small Entity Fee						
Large Entity Small Entity Fee						
Fee Fee Fee Fee Fee Fee Code (\$) Code (\$) Code (\$) Fee Description 103 18 203 9 Claims in excess of 20 104 280 204 140 Multiple dependent claims, if not paid 109 84 209 42 "Reissue independent claims over original patent over original patent over original patent 110 18 210 9 "Reissue claims in excess of 20 and over original patent 110 18 210 9 "Reissue claims in excess of 20 and over original patent 110 18 210 9 "Reissue claims in excess of 20 and over original patent 110 18 210 9 "Reissue claims in excess of 20 and over original patent 110 18 210 9 "Reissue claims in excess of 20 and over original patent 110 18 210 9 "Reissue claims in excess of 20 and over original patent 110 18 210 9 "Reissue claims in excess of 20 and over original patent 110 18 210 9 "Reissue claims in excess of 20 and over original patent 110 18 210 9 "Reissue claims in excess of 20 and over original patent 110 18 210 9 "Reissue claims in excess of 20 and over original patent 110 18 210 9 "Reissue claims in excess of 20 and over original patent 110 18 210 9 "Reissue claims in excess of 20 and over original patent 110 110 110 110 110 110 110 110 110 11						
103 18 203 9 Claims in excess of 20 102 84 202 42 Independent claims in excess of 3 104 280 204 140 Multiple dependent claims, if not paid 109 84 209 42 **Reissue independent claims over original patent 110 18 210 9 **Reissue claims in excess of 20 and over original patent SUBTOTAL (2) SUBMITTED BY To rumber previously paid, if greater; For Reissues, see above To property (times number of properties) 146 740 246 370 Filing a submission after final rejection (37 CFR § 1.129(a)) 149 740 249 370 For each additional invention to be examined (37 CFR § 1.129(b)) 179 740 279 370 Request for Continued Examination (RCE) 169 900 169 900 Request for expedited examination of a design application Cother fee (specify) *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 110.00						
104 280 204 140 Multiple dependent claim, if not paid 109 84 209 42 *** Reissue independent claims over original patent 110 18 210 9 *** Reissue claims in excess of 20 and over original patent SUBTOTAL (2) (\$) ***or number previously paid, if greater; For Reissues, see above (37 ČFR § 1.129(a)) 149 740 249 370 For each additional invention to be examined (37 CFR § 1.129(b)) 179 740 279 370 Request for Continued Examination (RCE) 169 900 169 900 Request for expedited examination of a design application Other fee (specify) *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 110.00 SUBMITTED BY Complete (if applicable)	* *					
104 280 204 140 Multiple dependent claim, if not paid 109 84 209 42 "Reissue independent claims over original patent 110 18 210 9 "Reissue claims in excess of 20 and over original patent SUBTOTAL (2) (\$) **or number previously paid, if greater; For Reissues, see above 149 740 249 370 For each additional invention to be examined (37 CFR § 1.129(b)) 179 740 279 370 Request for Continued Examination (RCE) 169 900 169 900 Request for expedited examination of a design application Other fee (specify) *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 110.00 SUBMITTED BY Complete (if applicable)			}			
109 84 209 42 ** Reissue independent claims over original patent over original patent solution over original patent solution of a design application substitute of the previously paid, if greater; For Reissues, see above substituted by Basic Filing Fee Paid substitution (\$\$) 110.00		149 740 249 370 For each additional invention to be				
Access to Labris in Access to 20 and over original patent SUBTOTAL (2) (\$) **or number previously paid, if greater; For Reissues, see above 169 900 169 900 Request for expedited examination of a design application						
SUBTOTAL (2) (\$) **or number previously paid, if greater; For Reissues, see above Cher fee (specify) *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 110.00 SUBMITTED BY Complete (if applicable)		179 740 279 370 Request for Continued Examination (RCE)				
SUBTOTAL (2) (\$) Other fee (specify) *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 110.00 SUBMITTED BY Complete (if applicable)	and over original patent					
**or number previously paid, if greater, For Reissues, see above *Reduced by Basic Filing Fee Paid *SUBTOTAL (3) (\$) 110.00 SUBMITTED BY *Complete (if applicable)	SUBTOTAL (2) (\$)	1				
SUBMITTED BY Complete (if applicable)		*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 110.0	00			
	or married providing plants, rich resolution, our married and a second s					
Nome (news) I John I Ockoron Registration No. 1/1 23/1 Telephone 1312-222-1860						

(Attorney/Agent) 01/11/2002 Date Signature



United States Patent and Trademark Office

COMMISSIONER FOR PATENTS UNITED STATES PATENT AND TRADEMARK OFFICE WASHINGTON, D.C. 20231 www.uspto.gov

APPLICATION NUMBER FILING/RECEIPT DATE FIRST NAMED APPLICANT ATTORNEY DOCKET NUMBER Tony Nick Frudakis

09/964,059 09/26/2001 0201-0001

ATTN: John J. Oskorep One Magnificent Mile Center **Sutie 1400** 980 N. Michigan Avenue

Chicago, IL 60611



CONFIRMATION NO. 1445 FORMALITIES LETTER *OC000000007024535*

Date Mailed: 11/05/2001

NOTICE TO FILE CORRECTED APPLICATION PAPERS

Filing Date Granted

This application has been accorded an Application Number and Filing Date. The application, however, is informal since it does not comply with the regulations for the reason(s) indicated below. Applicant is given TWO MONTHS from the date of this Notice within which to correct the informalities indicated below. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a)

The required item(s) identified below must be timely submitted to avoid abandonment:

- Substitute drawings in compliance with 37 CFR 1.84 because:
 - drawings submitted to the Office are not electronically reproducible. Drawing sheets must be submitted on paper which is flexible, strong, white, smooth, non-shiny, and durable (see 37 CFR 1.84(e));
- This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000). Applicant must provide an initial computer readable form (CRF) copy of the "Sequence Listing", an initial paper or compact disc copy of the "Sequence Listing", as well as an amendment directing its entry into the application. Applicant must also provide a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If applicant desires the sequence listing in the instant application to be identical with that of another application on file in the U.S. Patent and Trademark Office, such request in accordance with 37 CFR 1.821(e) may be submitted in lieu of a new CRF.

For questions regarding compliance to these requirements, please contact:

■ For Rules Interpretation, call (703) 308-4216



- To Purchase Patentin Software, call (703) 306-2600
- For Patentin Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

A copy of this notice <u>MUST</u> be returned with the reply.

Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE



TRANSMITTAL FORM FOR SEQUENCE LISTING ON COMPACT DISC (CD)

Patent Application Information:

Serial No.:

09/964,059

Filing Date:

09/26/2001

Inventor:

Frudakis

Title:

EFFICIENT METHODS AND APPARATUS FOR HIGH-THROUGHPUT

PROCESSING OF GENE SEQUENCE DATA

Compact Disc Information:

Enclosed:

1 Compact Disc (CD)

CD name:

CD COPY 1 of 2

Computer:

IBM-PC

Operating

System:

MS-WINDOWS

of files:

1

File Name:

seq listing

File

Contents:

Sequence Listing for the above-referenced Patent Application.

This compact disc is identical to the duplicate "CD COPY 2 of 2" filed

contemporaneously herewith.

File Size:

284 KB

File Creation

Date:

1/10/2002

TRANSMITTAL FORM FOR SEQUENCE LISTING ON COMPACT DISC (CD)

Patent Application Information:

Serial No.:

09/964,059

Filing Date:

09/26/2001

Inventor:

Frudakis

Title:

EFFICIENT METHODS AND APPARATUS FOR HIGH-THROUGHPUT

PROCESSING OF GENE SEQUENCE DATA

Compact Disc Information:

Enclosed:

1 Compact Disc (CD)

CD name:

CD COPY 2 of 2 (DUPLICATE)

Computer:

IBM-PC

Operating

System:

MS-WINDOWS

of files:

1

File Name:

seq_listing

File

Contents:

Duplicate copy of Sequence Listing for the above-referenced Patent Application.

This compact disc is identical and is a duplicate of "CD COPY 1 of 2" filed

contemporaneously herewith.

File Size:

284 KB

File Creation

Date:

1/10/2002